



United States Department of the Interior



FISH AND WILDLIFE SERVICE

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In Reply Refer to:

AESO/SE

22410-2003-F-0022

February 11, 2008

Memorandum

To: Regional Director, Fish and Wildlife Service, Albuquerque, New Mexico
(ARD-ES) (Attn: Luela Roberts-Strobel)

From: Field Supervisor

Subject: Findings and Recommendation on Issuance of an Enhancement of Survival Permit for the Gila Topminnow, Yaqui Topminnow, Quitobaquito Pupfish, and Desert Pupfish under the Safe Harbor Agreement for Topminnows and Pupfish in Arizona with the Arizona Game and Fish Department (TE-083686-0)

I. DESCRIPTION OF PROPOSAL

The Arizona Game and Fish Department (Department) has applied to the U.S. Fish and Wildlife Service (Service) for a permit to incidentally take the endangered Gila and Yaqui topminnow (*Poeciliopsis occidentalis* and *P. sonoriensis*) and endangered desert and Quitobaquito pupfish (*Cyprinodon macularius* and *C. macularius eremus*)(topminnow and pupfish) under authority of Section 10(a)(1)(A) of the Endangered Species Act of 1973, as amended (Act)(16 USC §1531-1544). The Department proposes to reestablish Gila topminnow, Yaqui topminnow, Quitobaquito pupfish, and desert pupfish (covered species) on suitable sites within their historical ranges in Arizona on non-Federal land following their proposed Safe Harbor Agreement (SHA). While some sites for reestablishment will be owned by the Department, most will not. Sites will be included in the SHA and covered by the permit through the Department's issuance of a Certificate of Inclusion to cooperating landowners (Cooperators). Sites covered by a Certificate of Inclusion will be considered enrolled properties. The Department will determine, in consultation with us, the appropriateness of each site proposed to be used. The SHA is designed to provide a net conservation benefit to topminnow and pupfish and to enhance survival and recovery. The SHA has stipulations for monitoring of the species' populations and habitats and compliance with its terms. The SHA also provides for funding the mitigation measures and monitoring. The Department's SHA, a statutory element of the incidental take permit application, includes adequate mitigation for the project's effects on topminnow and pupfish. The SHA will provide a net conservation benefit to the covered species and implement parts of each species' recovery plan.

II. ENVIRONMENTAL ASSESSMENT/FINDING OF NO SIGNIFICANT IMPACT AND PUBLIC COMMENT - ANALYSIS AND FINDINGS

We completed an Environmental Assessment and Finding of No Significant Impact (FONSI). The draft Safe Harbor Agreement for topminnow and pupfish in Arizona and its draft Environmental Assessment were made available for public review and comment on March 25, 2004 (FR 69 15362). The public review period closed on April 26, 2004. The only comments received were from the City of Phoenix, Dr. Philip Rosen, and the Center for Biological Diversity. Responses to the comments are provided in the final Environmental Assessment.

III. ENHANCEMENT OF SURVIVAL PERMIT CRITERIA - ANALYSIS AND FINDINGS

1. Taking of topminnow and pupfish is authorized in the subject permit as well as in another 10(a)(1)(A) permit issued to the Department (TE-821577-0) to cover captive breeding, holding, and transport of fish and will be in accordance with the terms of the SHA.

The SHA adequately describes the project and the taking expected to result from releasing topminnow and pupfish on non-Federal lands. Additional site-specific information will be included in the Certificate of Inclusion for each enrolled property. All anticipated take will occur on these lands. Sufficient information was provided in the SHA for us to conduct an independent examination of the impacts of the taking. Our examination of these impacts is in the biological opinion (file # 22410-2003-F-0022), which is incorporated here by reference. Individuals and the population at each enrolled property may be lost, but the sites will provide at least temporary refuge populations as well as a source of individuals for other releases. During the life of the SHA and permit, we expect that there will always be some existing populations established under the SHA. These actions will enhance the survival of the species and promote recovery in the wild by implementing some of the recovery tasks identified in the species' recovery plans. The SHA and biological opinion adequately describe the anticipated taking.

Enrolled landowners must notify the Department 30 days in advance of any planned management activity that may result in complete loss of individuals at a site and provide the Department the opportunity to capture and relocate individuals, if warranted. Landowners must also notify the Department 30 days in advance of any planned management activity that may result in any take of the species. The SHA describes the mitigation, monitoring, and other duties for which the Department and Cooperators are responsible. The Department will request funding that is adequate to implement the SHA. The SHA allows landowners to conduct any activity they choose other than release nonnative species.

2. The implementation of the terms of the SHA is reasonably expected to provide a net conservation benefit to the topminnow and pupfish by contributing to the recovery of the species, and the SHA otherwise complies with the Safe Harbor policy.

The SHA is reasonably expected to provide a net conservation benefit to the topminnow and pupfish, as required by our final Safe Harbor policy (69 FR 24084). The SHA's purpose is to establish a program for the conservation of topminnow and pupfish on non-Federal lands in Arizona.

Implementation of the SHA will provide a net conservation benefit for topminnow and pupfish in the following ways:

1. The SHA will provide refuge populations as insurance against catastrophic loss of natural populations and as sources for future reestablishment efforts;
2. Safe Harbor populations may count towards downlisting and delisting criteria as specified in the recovery plans;
3. The SHA will reduce the need to stock mosquitofish, which have contributed to the decline of topminnow and are a continuing threat; and
4. The SHA will provide convenient sites for public education and information related to endangered species recovery, conservation of limited resources, and aquatic ecology.

The net conservation benefit will be obtained through the increase in total numbers of existing populations of topminnow and pupfish. Additionally, use of topminnow or pupfish in lieu of mosquitofish will decrease the spread of nonnative mosquitofish. Through the SHA and implementation of elevated baseline conditions (likely to be considered for already existing suitable and secure habitats), it is anticipated that these populations will exist for longer periods of time, and may count toward downlisting and delisting criteria. A net conservation benefit is expected, whether or not landowners agree to an elevated baseline condition.

3. The probable direct and indirect effects of any authorized take will not appreciably reduce the likelihood of survival and recovery in the wild of any listed species.

We find that take will be incidental to otherwise lawful activities that are broadly identified in the SHA and will be specifically identified in the Certificates of Inclusion. The Department has included actions that should minimize take for the covered species. In addition, the Department is allowing and participating in actions that provide a net conservation benefit to the species and helping implement each species' recovery plan. They expect topminnow and pupfish from these areas to be used in other refuge or reestablishment sites. If management actions require long-term removal of fish, arrangements may be made to move them to another location. We have reviewed the issuance of this permit under Section 7 of the Act. In the biological opinion (incorporated by reference), we concluded that issuing the incidental take permit is not likely to jeopardize the continued existence of the Gila topminnow, Quitobaquito pupfish, Yaqui topminnow, desert pupfish, Yuma clapper rail, Chiricahua leopard frog, Canelo Hills ladies' tresses, Gila chub, razorback sucker, Huachuca springsnail, Huachuca water umbel, Sonora tiger salamander, southwestern willow flycatcher, yellow-billed cuckoo, and the headwater chub, nor is it likely to destroy or adversely modify critical habitat for

the Quitobaquito pupfish, Gila chub, razorback sucker, Huachuca water umbel, or southwestern willow flycatcher. Implementation of the SHA should contribute to the conservation and recovery of topminnow and pupfish, as the SHA is designed to provide a net conservation benefit to these species and helps to implement the relevant recovery plans. The SHA will not have significant adverse effects to other species survival or recovery, and may provide benefits for them.

4. Implementation of the terms of the Safe Harbor Agreement is consistent with applicable Federal, State, and Tribal laws and regulations.

The SHA complies with all other applicable Federal, State, and Tribal laws and regulations as outlined in the SHA and Environmental Assessment.

5. Implementation of the terms of the Safe Harbor Agreement will not be in conflict with any ongoing conservation or recovery programs for listed species covered by the permit.

The SHA is part of an overall strategy to implement the recovery plans for topminnow and pupfish. The four main goals of the SHA are all found in the recovery plans as recovery tasks:

- Provide refuge populations as insurance against catastrophic loss of natural populations and as sources for future reestablishment efforts;
- Populations may count toward downlisting and delisting criteria as specified in the recovery plans;
- Reduce the need to stock mosquitofish, or other nonnative fishes, which have contributed to the decline of topminnow and pupfish and are a continuing threat; and
- Provide convenient sites for public education and information related to endangered species recovery, conservation of limited resources, and native aquatic ecology.

The recovery program for topminnow and pupfish currently focuses on reestablishing populations in the wild on Federal lands, mainly because it is difficult to have a large program on non-Federal lands without a Safe Harbor or Habitat Conservation Plan. The SHA will now allow non-Federal lands to be considered for the reestablishment of populations of topminnow and pupfish. The expansion of the topminnow and pupfish recovery reestablishment program may also allow other conservation actions to occur on enrolled properties that may benefit other species and habitats.

6. The Applicant has shown capability for, and commitment to, implementing all of the terms of the SHA.

The conservation program established under the SHA will be a cooperative process between the Department, Service, Cooperators, and other partners. No single source will

fund the SHA. However, the Department has ensured that funding necessary to accomplish the SHA will be provided. The Department will seek and request funding adequate to implement the SHA. Other funds to support implementation of the SHA will also be sought. There has been an active conservation program for topminnow and pupfish since the early 1980s. The Department has had an active role in the conservation of topminnow and pupfish. The Section 6 agreement funding for topminnow and pupfish activities was probably one of the longest running Section 6 programs in the country. In addition, Memoranda of Understanding dating from the early 1980s and later demonstrate the Department's commitment to conserve and recover pupfish and topminnow in Arizona.

V. GENERAL CRITERIA AND DISQUALIFYING CRITERIA – ANALYSIS AND FINDINGS

We have no evidence that the permit application should be denied based on the criteria and conditions provided at 50 CFR 13.21(b)-(c). The applicant has met the criteria for the issuance of the permit under current regulations.

VI. RECOMMENDATIONS ON PERMIT ISSUANCE

Based on our findings with respect to the proposed action, we recommend issuance of a permit to authorize incidental taking of Gila and Yaqui topminnow and desert and Quitobaquito pupfish in accordance with the SHA.

Delda T. Bdb
Acting Field Supervisor

2/10/08
Date

Concur:
TJ Acting *TJ* *PL CBan*
Todd Jones, Deputy Regional Director

3/12/08
Date